

**Evans R, Bronfort G et al Two-Year Follow-up of a Randomized Clinical Trial of Spinal Manipulation [SMT] and Two Types of Exercise for Patients with Chronic Neck Pain. Spine 2002; 27:2383-2389.**

Design: Randomized clinical trial

Population and methods are identical to those of Bronfort 2001, which was adequate for evidence that exercise in addition to SMT is more effective in pain reduction than SMT alone for up to one year

The same population was followed for an additional 12 months.

Using the same analytical methods which were used in the 2001 study, advantages were observed for SMT plus exercise over SMT alone at 2 years of follow-up, and also for the specialized equipment (MedX) exercise over SMT alone.

The effect size of the exercise programs over SMT alone was small (less than 0.5 standard deviation, which is considered a moderate effect size), but the consistency of the group differences remained.

Patient satisfaction was again greater for SMT/exercise over the MedX group and also over the SMT alone group.

Authors' conclusions:

- SMT plus exercise is more effective than SMT alone in neck pain reduction at 2 years
- MedX exercise is more effective than SMT alone in neck pain reduction at 2 years
- The effect sizes fall short of the clinically relevant cutoff point of 0.5 standard deviation, but are likely to be real differences
- Rehabilitative exercise has positive effects for chronic neck pain two years after treatment

Comments:

- Because the SMT alone group received more additional care in the second year of the study than did the other two intervention groups, it is likely that the estimated effect size of 0.3 to 0.4 standard deviations is a conservative estimate of the effect size

Assessment; Adequate for evidence that exercise in addition to SMT is more effective in neck pain reduction two years after the end of active treatment